

## ABSTRACT

**[0001]** Stable copper colloid solutions are prepared from purified solutions of copper sulfate. The copper sulfate solution is purified by adding oxidizing agent and adding phosphoric acid or phosphate ion to precipitate iron or aluminum. Adjusting the pH yield a colloidal solution. A solid salt is made from the colloidal solution by mixing the colloidal solution with a water miscible organic solvent such as methanol or acetone. The copper colloidal solutions are shown to be effective fungicides against fusarium.